# CLAIMS

What is claimed is:

Sub A2

~~1. A modified JAVA(TM) execution environment comprising:~~

~~a substantially unmodified JAVA(TM) Virtual Machine,~~

~~a set of substantially unmodified base classes;~~

~~one or more overlays to the set of substantially unmodified base classes, the one or more overlays enabling corresponding base classes to support shared access by one or more substantially unmodified JAVA(TM) applications;~~

~~an unmodified primordial class loader for loading the system base classes as overlaid by the one or more overlays to the base classes;~~

~~a security manager supporting multiple applications and for limiting access to system resources according to user permissions; and~~

~~an dynamic class loader generator for creating a class loader for loading an application, the application classes and creating a thread group for the application.~~

~~2. The modified JAVA(TM) execution environment of claim 1, wherein the application includes at least one of an application class loader and an application security manager.~~

3. The modified JAVA(TM) execution environment of claim 1, wherein the one or more overlays include overlays to file classes to limit access to system resources according to user permissions associated with the application.

4. The modified JAVA(TM) execution environment of claim 1, wherein the application includes at least one of an application class loader and an application security manager.

5. The modified JAVA(TM) execution environment of claim 1, wherein the application includes one or more invocations of Abstract Window Toolkit (AWT) classes.

6. The modified JAVA(TM) execution environment of claim 1, wherein the one or more overlays support determining a calling application.

7. The modified JAVA(TM) execution environment of claim 6, wherein the determining a calling application comprises identifying the class loader of a calling method, and using the class loader to identify the application.

8. The modified JAVA(TM) execution environment of claim 6, wherein the determining a calling application comprises identifying the thread group for a calling method, and using the thread group to identify the application.

9. A method of supporting a number of applications in a single JAVA(TM) execution environment, the method comprising:

means for generating a class loader for each of the applications in the number of applications, the class loader providing a name space for each application, and a thread group for each application;

means for overlaying one or more substantially unmodified base classes to support the number of applications; and

means for determining a calling application for a method.

10. The method of claim 9, wherein at least one of the number of applications includes an application class loader.

11. The method of claim 9, wherein at least one of the number of applications includes an application security manager.

12. A computer data signal embodied in a carrier wave comprising:

a computer program for supporting a number of substantially unmodified JAVA(TM) applications on a substantially unmodified JAVA(TM) Virtual Machine (JVM), the JVM including a set of substantially unmodified base classes and a substantially unmodified primordial class loader, the program comprising:

a first set of instructions for generating a class loader for each of the JAVA(TM) applications in the number of JAVA(TM) applications, the class loader providing a name space for each application, and a thread group for each application;

a second set of instructions for overlaying one or more substantially unmodified base classes to support the number of applications; and a third set of instructions for determining a calling application for a method.

13. The computer data signal of claim 12, wherein the first set of instructions further associates a user with each application, and wherein the program further comprises a fourth set of instructions for limiting access to a system resource by an application according to whether the user associated with the application has access to the system resource.